

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-14 without prejudice or disclaimer and add new claims 15-27 as follows:

Claim 15 (new): A porous insulating film consisting essentially of a highly heat resistant polyimide resin film having a fine porous structure wherein:

- a) fine continuous channels reaching to both surfaces of the film in a nonlinear fashion have a mean pore size of 0.01 – 2 µm in the center and both surfaces of the film and a porosity of 15 – 80%;
- b) the polyimide resin film consists essentially of a polyimide obtained from the combination of at least one tetracarboxylic acid component and a diamine component ; and
- c) the film has a thickness of 5 – 150 µm and a resistance to passage of air of from 30 sec/100 cc to 2000 sec/100 cc.

Claim 16 (new): The porous insulating film according to claim 15, wherein the mean pore size is 0.05 – 1 µm.

Claim 17 (new): The porous insulating film according to claim 15, wherein the porosity is 30 – 80%.

Claim 18 (new): The porous insulating film according to claim 15, wherein the thickness is 5-100 µm.

Claim 19 (new): The porous insulating film according to claim 15, which is fabricated by a film casting method.

Claim 20 (new): The porous insulating film according to claim 15, which has a dielectric constant of no greater than 2.5.

Claim 21 (new): A porous insulating film consisting essentially of a highly heat resistant polyimide resin film having a fine porous structure wherein:

- a) fine continuous channels reaching to both surfaces of the film in a nonlinear fashion have a mean pore size of 0.01 – 2 µm in the center and both surfaces of the film; and
- b) the polyimide resin film consists essentially of a polyimide obtained from the combination of at least one tetracarboxylic acid component and a diamine component and has
 - (i) a thickness of 5 - 100 µm,
 - (ii) a resistance to passage of air of from 30 sec/100 cc to 2000 sec/100 cc,
 - (iii) a heat resistance temperature of at least 200°C and
 - (iv) a heat shrinkage of greater than ±1% at 105°C.

Claim 22 (new): A battery separator comprising a porous insulating film according to claim 21.

Claim 23 (new): The porous insulating film according to claim 15 or 21, wherein the tetracarboxylic acid component is selected from a biphenyltetracarboxylic dianhydride, pyromellitic dianhydride and a benzophenonetetracarboxylic dianhydride.

Claim 24 (new): The porous insulating film according to claim 15 or 21, wherein the diamine component is selected from a phenylenediamine or a diaminodiphenylether.

Claim 25 (new): The porous insulating film according to claim 15, wherein the pores in the porous structure are arranged in the film substantially parallel to the film surfaces.

Claim 26 (new): The porous insulating film according to claim 23, wherein the biphenyltetracarboxylic dianhydride is 3,3',4,4'-biphenyltetracarboxylic dianhydride.

Claim 27 (new): The porous insulating film according to claim 21, wherein the pores in the porous structure are arranged in the film substantially parallel to the film surfaces.